

(12) UK Patent Application (19) GB (11) 2 377 221 (13) A

(43) Date of Printing by UK Office 08.01.2003

(21) Application No 0224195.8

(22) Date of Filing 16.03.2001

(30) Priority Data

(31) PO6363 (32) 17.03.2000 (33) AU
(31) PR2700 (32) 24.01.2001

(86) International Application Data

PCT/AU2001/000297 En 16.03.2001

(87) International Publication Data

WO2001/070949 En 27.09.2001

(71) Applicant(s)

Benitec Australia Ltd
(Incorporated in Australia)
Level 4, 62 Pitt Street, Sydney, NSW 2000,
Australia

(71), (72) and (74) continued overleaf

(51) INT CL⁷

C12N 15/11 15/63

(52) UK CL (Edition V)

C3H HB7T HB7V H656 H684

(56) Documents Cited by ISA

Nature Genet; Vol 24, pp 180-183 (Feb 2000).**Tavernarakis et al****Biochim Biophys Res Comm**; Vol 263, pp 156-161(1999). **Wargelius et al****Dev Biol**; Vol 224, pp 20-28 (Aug 2000). **Oates et al****Curr Opin Genet Dev**; Vol 10, pp 211-216 (Apr 2000).**Birchler et al****Curr Opin Genet Dev**; Vol 10, pp 638-643 (2000).**Cogoni et al****Antisense Nucl Acid Drug Dev**; Vol 9, pp 241-252(1999). **Pulitz et al****Plant Mol Biol**; Vol 43, pp 295-306 (2000). **Marathe et al****FEBS**; Vol 479, pp 79-82 (Aug 2000). **Ui-Tei et al**

(58) Field of Search by ISA

Other: STN (WPIDS; MEDLINE)

(54) Abstract Title

Genetic silencing

(57) The present invention relates generally to a method of inducing, promoting or otherwise facilitating a change in the phenotype of an animal cell or group of animal cells including a animal comprising said cells. The modulation of phenotypic expression is conveniently accomplished via genotypic manipulation through such means as reducing translation of transcript to proteinaceous product. The ability to induce, promote or otherwise facilitate the silencing of expressible genetic sequences provides a means for modulating the phenotype in, for example, the medical, veterinary and the animal husbandry industries. Expressible genetic sequences contemplated by the present invention including not only genes normally resident in a particular animal cell (i.e. indigenous genes) but also genes introduced through recombinant means or through infection by pathogenic agents such as viruses.

GB 2 377 221 A

Best Available Copy

(71) cont

**The State of Queensland through its Department of
Primary Industries
(Incorporated in Australia - Queensland)
80 Ann Street, Brisbane, Queensland 4000,
Australia**

(72) Inventor(s)

**Michael Wayne Graham
Robert Norman Rice
Kathleen Margaret Murphy
Kenneth Clifford Reed**

(74) Agent and/or Address for Service

**Frank B Dehn & Co.
179 Queen Victoria Street, LONDON,
EC4V 4EL, United Kingdom**